DOCUMENT RESUME

ED 171 669 SP 014 282

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TITLE An Experimental Study of the Effects of Student Status and Performance Characteristics on Teacher Standards and Warmth.
PUB DATE Apr 79
NOTE 45p.; Paper presented at the Annual Meeting of the American Educational Research Association (San Francisco, California, April 8-12, 1979)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Academic Achievement; Behavior Theories; *Bias; Ethnic Status; *Expectation; *Interaction Process Analysis; Psychological Studies; Sex Discrimination; Social Background; *Student Characteristics; Student Teacher Relationship; *Teacher Attitudes; Teacher Behavior

ABSTRACT

A report is made on studies designed to experimentally assess the effects of student ethnicity, sex, achievement record, and behavior record on teacher presentations of standards and teacher warmth. Teachers reported on how they would respond to hypothetical classroom problems presented by students selected at random from their roll books. Responses scored for standards and warmth revealed several complex patterns of behavior based on differences in student characteristics. (Authors/ JD)

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ED171669

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Paper presented at the annual meeting of the
American Educational Research Association
San Francisco, California, April, 1979
Session Number 33.08

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SP 014282

An Experimental Study of the Effects of Student Status and Performance Characteristics on Teacher Standards and Warmth*

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Introduction

In this paper we examine the effects of student status characteristics and student performance characteristics on teacher behavior. Specifically, we investigate the effects of student ethnicity and student sex as well as the effects of student academic history and student behavior history on two dimensions of teacher behavior measured in teacher reports of their behavior. We focus on the extent to which teachers present standards to students and the extent to which teachers are warm to students.

Two separate studies provide the data for this investigation. In both studies teachers were asked to report on how they would respond to hypothetical classroom problems. In one study teachers were to assume that these problems were presented by students in hypothetical profiles. In the other teachers were to assume that the problems were presented by students selected at random from their class roll books.

Earlier studies which have reported differences in teacher behavior associated with differences in student characteristics have not controlled for differences in student classroom behavior. As a result it has not been possible to determine if reported differences in teacher behavior are the result of differences in student characteristics, as has generally been assumed, or if these differences are really the result of differences in student classroom behavior. The studies reported here are unique because

*The authors gratefully acknowledge the support of the Boys Town Center for the Study of Youth Development at Stanford University.

they control for student behaviors by providing teachers with hypothetical student classroom problems and ask for their responses. Thus they provide a less ambiguous measure of the effects of the student characteristics.

Our concern with the relationship between student characteristics and teacher behavior is motivated by the findings of social scientists that there are not only individual but also group differences in school achievement and in later occupational standing and income. (Coleman, et al., 1966; Jencks, et al., 1972) In the wake of these findings, policy makers are working to free school achievement from what seems to be a compelling association with class and ethnicity and guarantee that it reflects only the ineradicable range of abilities found in any human population.

But the same reports which indicated that schools did not reduce group differences in academic achievement, also revealed that these differences were not simply attributable to the type of system differences that are most amenable to the direction of educational policy makers (i.e. the distribution of educational resources). Thus while it may be important to equalize the distribution of educational resources, such equal distribution will not solve the problem of group differences in achievement. To address this problem we must pay attention to the internal life of the school.

Teacher Behavior and Group Achievement Differences

Since the public schools make contact with their clients, the students, chiefly through teacher-student interaction in the classroom and since it is through such interaction that schools affect student academic achievement, it is necessary to examine teacher-student interaction for sources of differences in group achievement. But to examine all the dimensions of teacher-student interaction would be a difficult and not terribly useful endeavor. Instead

we must identify and isolate some central dimensions of behavior which can be used to define the nature of the classroom situation.

In his review of the literature on the school as a formal organization Charles Bidwell (1965) suggests two dimensions of teacher behavior which determine student participation and performance in school. He first notes that in order to produce a uniform product, schools and teachers engage in the "universalistic and thus uniform assessment of student accomplishment." He goes on to note that this bureaucratic principle may be in conflict with teaching technology which "tends to particularize the student-teacher relation through the development of interpersonal bonds." Thus Bidwell points out that teaching behavior consists of instances of universalistic assessment as well as more diffuse responsiveness to students. In the present study we have further specified these teaching behaviors, and we will refer to 1) the extent to which the teacher presents school standards for performance, and 2) the extent to which the teacher is warm and friendly to students. We assume that to promote student learning teachers must engage in both these behaviors, an assumption which we have discussed at length elsewhere (Natriello, 1979). In the present study we are attempting to determine how teacher behavior in terms of these two dimensions differs for different groups of students in public schools.

While the literature on this subject is not well-developed, there are some studies which attempt to link differences in teacher behavior to differences in student status or performance characteristics. Most of these studies fall under what might be called the teacher expectations literature. The basic argument in all of these studies is rather simple. Teachers are said to identify individual students in terms of certain characteristics, form expectations of student achievement and behavior based on some general idea

of how students with those characteristics are likely to perform, and act as if such performances are normal for that child. Differences in teacher behavior toward different groups of students are thus seen as a result of different expectations.

While the literature in this tradition generally lacks any basic social-psychological theory to actually explain how teachers act differently, preferring instead to incorporate all notions of cause in the term "expectations," the results of this research are useful for thinking about differences in teacher behavior in terms of warmth and standards. Thus students who evoke higher teacher expectations may be seen to receive more presentations of teacher standards, while those who evoke lower teacher expectations may be seen to receive greater teacher warmth. We reviewed studies in this tradition which dealt with student ethnicity, student sex, student achievement, and student social behavior. Several studies found that teachers had greater expectations for white students than they did for black students (Coates, 1972; Cooper, et al., 1975; Gay, 1975). One study indicated greater teacher expectations for white students than for Chicano students (U.S. Civil Rights Commission, 1973).

Studies have also found differences in teacher expectations and behavior based on sex differences. Adams and LaVoie (1974) found that teachers had lower expectations for boys than for girls. Studies by Jackson and Lahaderne (1967) and by Dweck (1975) revealed that teacher interactions with boys were more likely to deal with non-intellectual aspects of their school performance than interactions with girls. It is rather difficult, however, to detect consistent patterns and draw solid conclusions about differences in teacher expectations and behavior based on student sex differences.

There are several studies which attempt to relate student academic

performance and social behavior to teacher behavior. DeGroat and Thompson (1949) and Good, et al., (1973) both found that higher achieving students received more teacher approval than lower achieving students. Feshbach (1969) and Adams and LaVoie (1974) found that teachers had higher expectations for students who they rated as more well-behaved. DeGroat and Thompson (1949) found that well-behaved students received more teacher approval.

While the studies in the teacher expectations tradition are suggestive, there is a study which more directly addresses the relationships between differences in student characteristics and differences in teacher presentations of standards and warmth. Massey, Scott, and Dornbusch (1975) report on a study of student perceptions in the San Francisco Unified School District. Their results indicate that Spanish Surname and Black students are more likely than White and Asian students to report that their teachers are warm and friendly. They also note that Spanish Surname and Black students achieve much less than White and Asian students. While there are variations for certain groups in some school subjects, the overall pattern is clear: students in those groups that are achieving less are more likely to see their teachers as warm and friendly.

Although teachers may be warm and friendly, they do not require diligence from their students. Massey, Scott, and Dornbusch collected students' perceptions related to two types of effort scales. One scale was a fairly specific measure of effort which they called Effort-Engagement Behaviors. They asked students about such things as how often they cut class, completed their homework, and daydreamed in class. The general pattern of results indicated that Spanish Surname and Black students were less likely to be high in effort than Asian and White students. Thus, by these less subjective measures students who achieved less were putting forth less effort.

But on their other effort scale, Massey, Scott, and Dornbusch obtained quite different results. For this second measure, called the Self-Assessment of Effort scale, each student was asked to subjectively rate his or her own level of effort. Here the differences in effort did not favor Whites and Asians. Black and Spanish Surname students were more likely to score high on the Self-Assessment of Effort scale than either Asian or White students.

Massey, Scott, and Dornbusch interpret these findings to suggest that the low achieving minority group students are not being presented with standards for achievement by their teachers. Since the low achieving students feel that they are working hard even though their own reports on less subjective measures belie this conclusion, the authors conclude that some of the group achievement differences may be attributed to the fact that low achieving groups are not presented with challenging standards. The lack of challenge for low achieving students may also be assessed in terms of the perceived difficulty of school work in various subjects. For each subject it was found that low achieving students perceived school as less difficult than did higher achieving students. These data are certainly consistent with the view that teachers stop presenting standards to low-achievers and substitute warmth for standards. To buttress that finding the San Francisco study did indeed find that Black and Spanish Surname students felt that their predominantly Anglo teachers were warm toward them compared to the perception of Anglo teachers by Anglo and Asian American students.

Theoretical Perspective

Thus there are studies indicating that teachers differ in the extent to which they present standards and warmth to students with different characteristics. The student characteristics may be status characteristics such as ethnicity and sex or performance characteristics such as academic achievement

or social behavior in school. What is generally lacking in this literature is any solid theoretical perspective through which to view the phenomenon. It is part of our task to begin to develop such a perspective to guide further inquiry.

In search of a useful theory we turned to Theodore Newcomb's theory of communicative acts (Newcomb, 1956). While the theory as formulated by Newcomb was never meant to address the present problem and while it is somewhat less than ideal in this respect, it does suggest some new ways to look at the phenomenon. Key to Newcomb's approach to studying interaction is the notion of orientation. The theory and our review of research related to teacher-student interaction suggest that teachers may act differently toward students who they believe to be oriented to the school than to those who they believe are not oriented to the school. In his discussion of schools as formal organizations, Bidwell (1965) points out that the student role is a recruitment role and that:

> Young persons are compelled to enter school systems as students simply because of their placement in certain age grades, without reference to specific performances. Furthermore, since students are to be socialized to adult life, the central activities of this role are not directly relevant to the immediate interests or lives of its incumbents.

This aspect of the nature of schools has a profound influence on the behavior of teachers in the classroom, particularly in terms of the dimensions we have focused on--standards and warmth. Presenting standards to students and demanding their compliance under these circumstances may not be enough to promote learning. Bidwell notes this while reviewing the contribution of Willard Waller to the study of schools:

> Motivation to learn, he said, is very largely a product of a close, warm relation between teacher and student. Compliance may produce little intrinsic learning and a good deal of internal resistance among students. (Bidwell, 1965)

It becomes clear that when students are "motivated," to use Bidwell's term, or "oriented," to use Newcomb's, teachers will be likely to behave differently toward them than when they are not so disposed.

Thus we formulated general propositions to predict teacher behavior toward students who are oriented or not-oriented toward the school. However, in formulating these propositions we focused on teacher behavior in response to certain classroom problems presented by students. We focused on teacher behaviors in these particular circumstances because we felt that they were crucial teacher-student interactions, crucial both from the standpoint that they would be the most likely areas of differences in teacher behavior and from the standpoint that it is interactions at junctures such as these that determine, in part at least, student performance. We directed our attention to those interactions where the norms of the school came into conflict with the classroom behavior of the students and developed the following general predictions of teacher behavior:

a) If the teacher perceives the student as oriented toward the norms of the school, but the student has failed to act in accordance with them by demonstrating effort to achieve them on this occasion, the teacher will communicate standards for effort to the student.

b) If the teacher perceives the student as not oriented toward the norms of the school, then the teacher will be less likely to present standards for student effort, and will attempt to promote a favorable attitude in the student by increasing the amount of warmth presented.

We were careful to define the classroom problems presented by students, whether academic or behavioral in nature, as problems resulting from the failure of the student to put forth effort since we wanted to avoid problems resulting from a situation where a student put forth effort, but lacked ability. Thus in our conception a teacher's decision as to whether a student is oriented toward the norms of the school is based on perceptions of his past history of effort. However, it is not possible for the teacher to always know whether

a student is oriented. In making such decisions teachers must rely on other kinds of information. We believe that teachers use information not only about past academic achievement and social behavior, but also about the students' ethnicity and sex to make such decisions. Thus we believed that teachers would use information on the status and performance characteristics of students to make decisions as to whether or not a student was oriented. We believed that Black students, Spanish Surname students, male students, low achieving students, and poorly behaved students were more likely to be viewed as not oriented to the school, while White students, Asian students, female students, high achieving students, and well-behaved students were more likely to be viewed as oriented to the norms of the school. We formulated the following hypotheses:

When responding to acts by students which indicate an immediately preceding lack of effort to achieve school norms for academic achievement or social behavior,

1a. Teachers will be more likely to present school standards to Asian and White students than to Black and Spanish Surname students.
1b. Teachers will be more likely to present warmth to Black and Spanish Surname students than to Asian and White students.

2a. Teachers will be more likely to present school standards to female students than to male students.
2b. Teachers will be more likely to present warmth to male students than to female students.

3a. Teachers will be more likely to present school standards to students with records of high academic achievement than to students with records of low academic achievement.
3b. Teachers will be more likely to present warmth to students with records of low academic achievement than to students with records of high academic achievement.

4a. Teachers will be more likely to present school standards to students with records of good social behavior than to students with records of poor social behavior.
4b. Teachers will be more likely to present warmth to students with records of poor social behavior than to students with records of good social behavior.

We set out to design an experiment to test all of these hypotheses.

The Design of the Studies

Two studies were designed to test the eight hypotheses. Both studies involved secondary school teachers, and since the hypotheses involved differences in teacher behavior as a result of differences in student ethnicity, sex, academic achievement record, and social behavior record, teachers who had taught students representing the range of these characteristics were used.

Previous studies of differences in teacher behavior based on differences in student characteristics have not controlled for differences in student classroom behavior. Thus it has not been possible to ascertain whether reported differences in teacher behavior resulted from differences in student characteristics or from differences in student behavior. The two studies reported here are unique in that they control for student behavior by providing teachers with specific hypothetical classroom behaviors and asking for their responses.

In more formal terms the student status characteristics and performance characteristics served as the independent variables, the instances of student classroom behavior (i.e. failures to conform to the school norms for academic achievement or social behavior) were additional independent variables which were controlled, and the teacher responses to the problems were the source of the dependent variables. In both studies teacher responses to the classroom problems were coded in terms of the extent to which teachers presented standards and/or warmth to students.

Both studies required teachers to complete questionnaires ostensibly designed to determine how they handle typical classroom problems. The first study, which we called the hypothetical student study, was in the form of an experiment. In the questionnaire for this study teachers were presented with

typical classroom problems and asked to explain how they would respond to these student failures to put forth effort to conform to the academic achievement or social behavior norms of the school.

Along with each problem teachers were provided a profile of the student involved. The profile contained information on the student's ethnicity, sex, academic achievement record, and social behavior record. After reading the classroom problem and the student profile, teachers were asked to explain how they would respond to the problem. Teacher replies were scored according to the extent to which they evidenced the presentation of standards and/or warmth.

The second study, which we called the roll book student study, was in the form of a field experiment. In the questionnaire for this study, another group of teachers was presented with typical classroom problems and asked how they would respond.

This time the teachers were not provided with student profiles. Instead, they were asked to randomly select students from their roll books and to associate them with the classroom problems. Thus teachers were asked how they would respond if the student selected at random from their roll books failed to conform to school norms. At the end of the questionnaire teachers were asked to supply information on the status characteristics and performance characteristics of these students. As with the first questionnaire, teacher responses were scored according to the extent to which they evidenced the presentation of standards and/or warmth.

The two questionnaires that were used in the studies employ similar formats. Each study was presented to teachers as an attempt to investigate how they handle typical classroom problems. Sixteen different classroom problems, eight involving failure to show effort to conform to academic achievement norms (e.g. You see that a student in your class is not handing

in homework assignments.) and eight involving failure to show effort to conform to social behavior norms (e.g. You note that a student in your class is being belligerent and aggressive toward other students.), were developed in consultation with a group of classroom teachers. These problems were randomly ordered and their position on the questionnaires was systematically rotated. Thus the problem that appeared in the first position on the first questionnaire appeared in the second position on the next questionnaire. Since no problem appeared more than once on any form of the questionnaire, teacher attention was directed to the problems rather than to the pattern of characteristics in the student profiles. By casting the questionnaire as an instrument to investigate responses to classroom problems, the distribution of status and performance characteristics in the student profiles was made to seem less artificial.

The questionnaires were field tested in May 1977. Thirty teachers in three California secondary schools participated in the field test. Initial concerns that teachers might not respond naturally to this type of questionnaire were allayed by the responses of teachers to the field test. Most teachers seemed to enjoy completing the questionnaires and presenting their problem-solving approach to the questionnaire administrators. Teachers often answered the questions in much greater detail than was expected, and group administrations were sometimes followed by discussion among teachers of the problems on the questionnaire. Apparently, it provided them with a common ground for discussion of their professional behavior.

However, it is important to note here that while using questionnaires to collect data on teacher classroom behavior has many advantages, it also has the rather major disadvantage of not directly observing classroom behavior. Teachers will, no doubt, respond differently to the hypothetical problems

presented in the questionnaires than they would to actual problems presented in the classroom for two reasons. First, they have the time to reflect on their responses to the questionnaires. Second, they are presenting their ideas to an outside audience. This means that the responses to the questionnaires do not provide a substitute for classroom behavior, but rather ideas linked to it.

We developed two different studies that would provide comparable data and that would complement each other. The hypothetical student study provides us with systematic data on the effects of the student characteristics. Since we are able to control the assignment of student characteristics we are able to assess the independent effects of each characteristic. Of course, the disadvantage of this study is that it collects data on situations that might be quite removed from the actual classrooms of the teachers involved. The roll book student study, on the other hand, has the advantage of allowing us to get closer to the actual classroom behavior of teachers by asking them to react to students from their own classes. However, since we do not control the assignment of student characteristics in the roll book student study, we cannot easily assess the independent effects of each characteristic. By using both techniques to study the effects of student characteristics on teacher behavior, we can have increased faith in findings supported by both studies.

Teachers from 23 secondary schools in New Jersey and California participated in the studies. The hypothetical student study involved questionnaires completed by 156 teachers, while the roll book student study involved questionnaires from 168 teachers. Teachers or their schools received $5.00 for each questionnaire completed. Teacher participation ranged from 25% to 65% of the total faculty of the schools involved. Although it was not possible to secure the cooperation

of entire faculties or to sample randomly from the faculties, there are no apparent selection biases in the sample related to the purposes of these studies.

The 324 teachers in the two studies were employed in 15 high schools and eight junior high schools. The schools, with two exceptions, had mixed ethnic populations and would generally be considered to be integrated. All teachers, with the exception of those 30 who participated in the field test, were surveyed during the 1977-1978 school year.

Coding Procedures

The open-ended responses of the teachers to each classroom problem were coded in terms of the extent to which they evidenced the presentation of standards and the extent to which they evidenced warmth. Although our initial approach was to code simply for the presence or absence of standards and warmth, early trials of the simple coding system were plagued by two types of problems. Coders were confused: 1) as to whether a response was to be coded as evidencing standards/warmth if the standards/warmth were present in the decision-making process of the teacher but were not communicated to the student, and 2) as to whether a response was to be coded as evidencing standards/warmth if the standards/warmth were only implied. Greater accuracy and reliability resulted when a multiple value coding system provided for distinctions between uncommunicated and communicated standards/warmth and implicit and explicit standards/warmth. Although these distinctions are not mentioned in our hypotheses, they do seem important both to ensure the reliability of the coding and for comparing our results with the results of earlier studies based on student perceptions. Student perceptions of standards/warmth are, of course, affected by whether such teacher behaviors are explicit and communicated.

There were five coded values for each of the two dimensions. The values for standards were:

0 = The response contains no evidence of standards for student effort.
1 = The response contains evidence of implicit standards used by the teacher for decision-making. There is no evidence that these implicit standards are communicated to the student.
2 = The response contains evidence of implicit standards communicated by the teacher to the student.
3 = The response contains evidence of explicit standards used by the teacher for decision-making. There is no evidence that these explici. standards are communicated to the student.
4 = The response contains evidence of explicit standards communicated by the teacher to the student.

Each higher value was posited to meet the requirements of the lower values. Thus explicit standards were also present when standards were explicit and standards communicated to students were also standards used in decision-making. The coded value 3 (Explicit Standards in Decision-Making) was assumed to be greater than the coded value 2 (Implicit Standards Communicated) because in reading the teacher responses it was found that teachers always communicated standards at least implicitly whenever they referred to an explicit standard in their decision-making process. An independent check was made on the coders to see if this was always the case, and in fifty out of fifty cases where the coders scored a response as a "3" for explicit standards for decision-making, the response also contained evidence of implicit standards communicated by the teacher to the student.

In coding for warmth we focused on the extent to which the teacher evidenced personal concern for the student. The values for warmth were:

0 = No Personal Concern - Responses in which the teacher pays no attention to the student and his general situation in deciding how to handle the classroom problem.
1 = Personal Concern Implicit in Decision-Making - Responses in which the teacher implicitly pays attention to the student and his general situation in deciding how to handle the classroom problems.
2 = Personal Concern Explicit in Decision-Making - Responses in which the teacher explicitly pays attention to the student and his general situation in deciding how to handle the classroom problem.

3 = Personal Concern Implicit in Communication - Responses in which the teacher makes some implicit mention of the student and his general situation in handling the classroom problem.
4 = Personal Concern Explicit in Communication - Responses in which the teacher makes some explicit mention of the student and his general situation in handling the classroom problem.

Once again each higher value was assumed to meet the requirements of the lower values. Thus explicit personal concern was assumed to be also at least implicit, and communicated personal concern was assumed to be also at least a factor in decision-making. Unlike the case of standards, explicit personal concern in decision-making was not always communicated. However, concern that was communicated was generally at least explicit in the teacher's decision-making process. Thus "personal concern explicit in decision-making" was coded as "2", while "personal concern implicit in communication" was coded as "3".

All responses were coded by two coders who received training in the use of the coding system. In all cases one coder was familiar with the aims of the study, while the other was not. Tests of inter-rater reliability revealed that using the five category systems for the two dimensions resulted in only 74% agreement between coders for standards and only 60% agreement between coders for warmth. When the five categories were collapsed into two the agreement between coders reached acceptable levels. Depending upon how we divided the categories, the agreement between coders ranged from 79% to 98% for standards and from 79% to 90% for warmth. In order to improve the accuracy of the coding and enable us to use all coding categories in the analyses, all disagreements between coders were settled by a conference on the particular response. Discussion of the item then resulted in a final rating. An examination of initial rater values and the final coded value for items on which there was disagreement revealed that one coder did not dominate the other in the conferences.

Results

The hypothetical student study involved 156 teachers in 14 different schools each responding to 16 classroom problems associated with hypothetical student profiles for a total of 2496 individual responses. The roll book student study involved 168 teachers in 18 different schools responding to eight classroom problems which they associated with students from their own roll books for a total of 1344 responses. Analysis proceeded at two levels, the level of the student where there were 2496 and 1344 observations respectively for the two studies and at the level of the teacher where there were 156 and 168 observations respectively for the two studies. Of course, only the analysis at the teacher level involved independent observations, and so it is only at this level that we can employ tests of statistical significance. At the student level we examined contingency tables and calculated measures of association. At the teacher level we aggregated the data and performed matched-pairs t-tests to determine statistical significance.

Before we consider the results as they apply to our hypotheses, we should note an interesting unpredicted finding. Earlier we discussed the view that to promote student participation and achievement teachers should present both standards and warmth to students. When we examine the relationship between teacher standards and teacher warmth in the responses to the two studies, we find that teachers tend not to use both techniques together. There is a negative relationship between standards and warmth in both the hypothetical student study (gamma = -.22) and in the roll book student study (gamma = -.26). Thus while there is nothing inherent in the nature of these two behaviors which makes them incompatible, teachers tend to act as if they are.

In examining the results we will consider the effects of each independent variable on teacher standards and warmth as indicated by both studies. In

addition since we found that teachers responded quite differently to academic effort problems than to social behavior problems, we will present the analyses of the responses to academic problems separately from the analyses of the responses to behavior problems.

The Effects of Student Ethnicity on Teacher Standards and Warmth

The hypothesis that Black and Spanish Surname students would receive fewer presentations of standards than White and Asian students is not supported by either the analysis of teacher responses to academic problems or the analysis of teacher responses to behavior problems. For academic problems teacher standards were rather evenly distributed in the hypothetical student study. In the roll book student study teachers were slightly more likely to show "no evidence" of standards for Asians and Blacks, as table 1 indicates.

Table 1 - Distribution of Teacher Responses Scored on Standards for Academic Problems, by Student Ethnicity in the Roll Book Student Study

Standards	Ethnicity			
	White	Spanish	Asian	Black
No Evidence	37 (7.6%)	5 (9.3%)	4 (11.4%)	8 (12.7%)
Implicit in Decision Making	35 (7.2%)	4 (7.4%)	2 (5.7%)	6 (9.5%)
Implicit in Communication	274 (56.6%)	24 (44.4%)	25 (71.4%)	31 (49.2%)
Explicit in Decision Making	34 (7.9%)	2 (3.7%)	0 (0%)	3 (4.8%)
Explicit in Communication	104 (21.5%)	19 (35.2%)	4 (11.4%)	15 (23.8%)
	N = 484	N = 54	N = 35	N = 63

Further analysis of the open-ended teacher responses revealed that teachers react this way to Asian students because they feel that they do not have to worry about

them, while they show no evidence of standards for Black students when they have given up on them. Teachers are less likely to present explicit standards for academic achievement to Asians than to students in the other ethnic groups. This is consistent with the observation made during the coding process that teachers have very high regard for the academic performance of Asian students. Finally, teachers are more likely to present explicit communications of standards to Spanish Surname students than to students in the other three ethnic groups. However, the analyses of responses to academic problems at the teacher level reveal that there are no significant differences among teacher standards for students in the four ethnic groups.

The analysis of teacher responses to behavior problems shows no differences in scores for standards in the hypothetical student study, but a very slight tendency for Black and Spanish Surname students to receive more teacher standards than White and Asian students in the roll book student study, as revealed in table 2 below.

Table 2 - Distribution of Teacher Responses Scored on Standards for Behavior Problems, by Student Ethnicity in the Rool Book Student Study

Standards	Ethnicity			
	White	Spanish	Asian	Black
No Evidence	14 (2.8%)	0 (0%)	0 (0%)	0 (0%)
Implicit in Decision Making	26 (5.2%)	2 (4.2%)	2 (5.7%)	1 (1.8%)
Implicit in Communication	245 (49.2%)	28 (58.3%)	18 (51.4%)	26 (47.3%)
Explicit in Decision Making	41 (8.2%)	1 (2.1%)	2 (5.7%)	4 (7.3%)
Explicit in Communication	172 (34.5%)	17 (35.4%)	13 (37.1%)	24 (43.6%)
	N = 498	N = 48	N = 35	N = 55

At the teacher level the only significant difference is that between teacher

standards for White students and teacher standards for Black students. The means for standards were 2.48 for White students and 2.91 for Black students. Forty-one teachers responded to problems presented by both White students and Black students in the roll book student study, and the difference was significant at the .01 level. Thus, overall, contrary to our hypothesis, Black and Spanish Surname students received as many or more presentations of standards for behavior problems as did White and Asian students.

Turning to teacher warmth, we find that in responding to academic problems, teachers are equally warm to the students in the four ethnic groups in the hypothetical student study. In the roll book student study, however, teachers are least likely to show "no warmth" to Asian students as portrayed in table 3.

Table 3 - Distribution of Teacher Responses Scored on Warmth for Academic Problems by Student Ethnicity in the Roll Book Student Study

Warmth	Ethnicity			
	White	Spanish	Asian	Black
No Warmth	165 (34.0%)	23 (42.6%)	7 (20.0%)	23 (36.5%)
Implicit in Decision Making	200 (41.2%)	23 (42.6%)	18 (51.4%)	21 (33.3%)
Explicit in Decision Making	83 (17.1%)	7 (13.0%)	7 (20.0%)	12 (19.0%)
Implicit in Communication	31 (6.4%)	0 (0%)	1 (2.9%)	7 (11.1%)
Explicit in Communication	5 (1.0%)	1 (1.9%)	2 (5.7%)	0 (0%)
	N = 484	N = 54	N = 35	N = 63

The finding from analysis of individual responses that teachers are likely to present more warmth to Asian students is consistent with our observation that teachers have high regard for their Asian students. However, the responses to academic problems aggregated to the teacher level show no significant differences in teacher warmth for Black and Spanish Surname students and White and Asian

students.

It is not surprising that the results of the two studies should be somewhat different. The fact that teachers are warmer to Asian students in the roll book student study but not in the hypothetical student study may be attributable to the fact that we did not control for other student characteristics in the roll book student study. Thus teachers in the roll book student study are reacting to their own Asian students, not to our hypothetical students who are equally divided as to sex, achievement record, and behavior record.

In examining teacher responses to behavior problems, we found no differences in teacher warmth toward students of different ethnic groups in the hypothetical student study, but in the roll book student study we found that teachers were once again more likely to have warmth for Asian students. Table 4 below illustrates this difference.

Table 4 - Distribution of Teacher Responses Scored on Warmth for Behavior Problems, by Student Ethnicity in the Roll Book Student Study

Warmth \ Ethnicity	White	Spanish	Asian	Black
No Warmth	220 (44.2%)	23 (45.1%)	14 (38.9%)	27 (48.2%)
Implicit in Decision Making	195 (39.2%)	17 (33.3%)	19 (52.8%)	23 (41.1%)
Explicit in Decision Making	64 (12.9%)	7 (13.7%)	1 (2.8%)	4 (7.1%)
Implicit in Communication	12 (2.4%)	1 (2.0%)	2 (5.6%)	2 (3.6%)
Explicit in Communication	5 (1.0%)	2 (3.9%)	0 (0%)	0 (0%)
	N = 496	N = 50	N = 36	N = 56

The responses to behavior problems aggregated to the teacher level show no

significant differences between teacher warmth for Asian and White students and teacher warmth for Black and Spanish Surname students. Thus there is no evidence in either study to support the hypothesis is that Black students and Spanish Surname students receive greater teacher warmth than White students and Asian students.

The Effects of Student Sex on Teacher Standards and Warmth

The hypothesis that teachers would be more likely to present standards to female students than to male students is not confirmed by the results of either study. Examining the results of each study for both academic and behavior problems, we find that there are no substantial differences between standards for male students and standards for female students. Aggregated to the teacher level, the data once again fail to reveal any significant differences in teacher standards for male students and female students.

Examining the effects of student sex on teacher warmth, we find that the results of the two studies for both academic and behavior problems indicate that there are no substantial differences between teacher warmth for male students and teacher warmth for female students.

When we aggregate the data to the teacher level we find that in the roll book student study teacher responses to behavior problems did show significantly more warmth for male students than for female students. The mean scores for teacher warmth in this study were 0.83 for males and 0.64 for females. With 127 teachers in the study responding to behavior problems presented by both males and females, this difference was significant at the .01 level. In the hypothetical student study there were no significant differences in teacher warmth. It is not surprising that there were no significant differences in the hypothethical student study since in that study we controlled the other student

characteristics which may have influenced the teachers' reponses in the roll book student study.

Thus the hypothesis that teachers would be more likely to be warm to male students than to female students was confirmed in one out of four comparisons, in the case of teacher responses to behavior problems in the roll book student study. The other three comparisons revealed no significant differences in teacher warmth.

The Effects of Status Characteristics

Of the twenty-four comparisons involving differences in student ethnicity, only one revealed significant differences in teacher behavior. This difference was opposite to the one predicted, and the comparison involved a small number of teachers in the roll book student study where the other variables could not be controlled. Of the eight comparisons involving differences in student sex, only one revealed significant differences in teacher behavior. Though this difference was in the predicted direction, the comparison involved 127 teachers in the roll book student study where, once again, other variables could not be controlled. In the hypothethical student study where the other variables were controlled, the results failed to confirm those of the roll book student study.

The failure to find consistent patterns of differences in teacher standards and warmth in these experimental studies is in contract to the results of the field research on teacher behavior. This may be due to the fact that the earlier field research did not control for student behavior. Thus teachers may have been reacting to differences in the behavior of students who also differed in terms of ethnicity and sex, rather than to differences in the status characteristics themselves.

Earlier field studies may also have found differences in teacher behavior

which appeared to be based on differences in status characteristics because of the association of student status characteristics with student performance characteristics. The fact that we found differences in teacher behavior only in the roll book student study where we could not control for the relationship of status and performance characteristics is consistent with this interpretation. In the hypothetical student study where we could control for both the effect of student behavior in the classroom and the effect of performance characteristics, we found that there were no differences in teacher behavior based on differences in student ethnicity.

Of course, there is the possibility that the teachers in the present studies responded differently to the hypothetical situations than they would to real day-to-day classroom problems. It may be that status characteristics play a part in determining teacher behavior in actual teaching situations where teachers have incomplete information on student performance characteristics.

Even if we are measuring teacher ideals rather than actual behavior, certain unpredicted differences do appear. First, teachers seem less likely to present standards for academic achievement and more likely to be warm to Asian students. Second, teachers are least likely to show evidence of standards for Black students who present academic problems and most likely to present standards when these Black students present behavior problems. We view the first finding as a result of teachers' high regard for the ability of Asian students, while we believe that the second finding reflects the fact that teachers give up on Black students with achievement problems but hold them accountable for standards for social behavior. However, the role played by student status characteristics is a complex one, and one which must be considered in the light of more knowledge of the effects of student performance characteristics.

The Effects of Student Achievement Record on Teacher Standards and Warmth

When we examined the responses of teachers to academic problems in the hypothetical student study, we found that teachers did not differ substantially in their use of standards for high achieving and low achieving students. The results of the same analysis for the roll book student study were a bit more complex. Since teachers in this study were allowed to rate the previous achievement of the students selected from their class roll books on a five category scale, table 5 below shows the distribution of teacher standards for students in each of five achievement categories.

Table 5 - Distribution of Teacher Responses Scored on Standards for Academic Problems, by Student Achievement Record in the Roll Book Student Study

Standards	Achievement Record				
	Very Low	Low	Fair	High	Very High
No Evidence	6 (15.0%)	11 (11.0%)	18 (7.9%)	6 3.6%)	13 (12.4%)
Implicit in Decision Making	2 (5.0%)	7 (7.0%)	16 (7.0%)	12 (7.1%)	10 (9.5%)
Implicit in Communication	14 (35.0%)	59 (59.0%)	122 (53.3%)	103 (60.9%)	59 (56.2%)
Explicit in Decision Making	3 (7.5%)	2 (2.0%)	20 (8.7%)	11 (6.5%)	4 (3.8%)
Explicit in Communication	15 (37.5%)	20 (20.0%)	53 (23.1%)	36 (21.3%)	17 (16.2%)
	N = 40	N = 99	N = 229	N = 168	N = 103

Gamma = -0.05

There appears to be no evidence to support the hypothesis that low achieving students receive fewer communications of teacher standards than high achieving students. In fact, the very low achieving students evoke a greater percentage of their teacher responses in the form of explicitly communicated standards (37.5%) than students in the "low" (20.0%), "fair" (23.1%), "high" (21.3%), or

"very high" (16.2%) categories. Overall, there is a tendency for teachers to present more standards to students in the middle of the achievement range, those whose achievement record is "fair" or "high". Those with "very low", "low", and "very high" achievement records are presented with somewhat fewer standards.

Although we realized that there was not likely to be a relationship between a student's behavior record and a teacher's responses to academic problems, we performed the analysis for teachers' responses to behavior problems just to check our suspicion. When we examined the distribution of teacher standards for behavior problems we found that in both studies there were no differences in teacher responses to students with different academic records.

When we aggregated the data to the teacher level the analyses of responses to both academic and behavior problems revealed no significant differences between teacher standards for high achieving students and teacher standards for low achieving students* Thus the hypothesis that teachers would present more standards to students with records of high achievement than they would to students with records of low achievement is not confirmed.

The effects of past student achievement on teacher warmth in response to academic problems in the hypothetical student study are shown in table 6.

*In the aggregated data for the roll book student study the student achievement categories "very low" and "low" were collapsed to form the "low" category, the categories "very high" and "high" were collapsed to form the "high" category, and teacher responses to students whose achievement was classified as "fair" were excluded from the analyses. This limitation to extremes in analyzing aggregated data from the roll book student study makes it inappropriate to use tests of significance, yet by eliminating the "fair" category from the analyses, the conditions of the hypothetical student study can be reproduced more closely. This procedure was followed in all analyses of aggregated data involving performance characteristics in the roll book student study.

Table 6 - Distribution of Teacher Responses Scored on Warmth for Academic Problems, by Student Achievement Record in the Hypothetical Student Study

Warmth	Achievement Record: Low	Achievement Record: High
No Warmth	238 (39.7%)	230 (37.4%)
Implicit in Decision Making	148 (24.7%)	232 (37.7%)
Explicit in Decision Making	129 (21.5%)	84 (13.7%)
Implicit in Communication	65 (10.9%)	57 (9.3%)
Explicit in Communication	18 (3.0%)	12 (2.0%)
	N = 598	N = 615

Gamma = -0.06

There is a slight tendency for low achieving students to have more warmth communicated to them. There is also a tendency for warmth to more often figure explicitly in a teacher's decision making for low achieving students. Finally, there is a very slight tendency for high achieving students to receive more warmth (as opposed to "no warmth") than low achieving students. We realize that all of these tendencies are very small, and we present them only because they are consistent with more substantial tendencies found in the results of the roll book student study.

The distribution of teacher warmth in response to academic problems in the roll book student study revealed two different trends. To more clearly display these trends we have regrouped the data in tables 7a and 7b. In table 7a below we regroup all types of evidence of teacher warmth into one category which we term simply "warmth" and which we contrast with the category "no warmth". As table 7a indicates, teachers are more likely to be warm to students with

records of high achievement than to those with records of low achievement.

Table 7a - Teacher Warmth by Student Achievement Record for Academic Problems in the Roll Book Student Study

Warmth	Achievement Record				
	Very Low	Low	Fair	High	Very High
No Warmth	20 (50.0%)	35 (35.0%)	84 (36.8%)	50 (29.9%)	30 (28.6%)
Warmth	20 (50.0%)	65 (65.0%)	143 (63.2%)	117 (70.1%)	75 (71.4%)
	N = 40	N = 100	N = 227	N = 167	N = 105

Gamma = 0.11

To show the second trend in table 7b below we regrouped the data so we could compare the responses evidencing implicit warmth with those evidencing explicit warmth. As the table shows, warmth seems to play a more explicit role in teacher responses to low achieving students than in teacher responses to high achieving students.

Table 7b - Explicit Teacher Warmth by Student Achievement Record for Academic Problems in the Roll Book Student Study

Warmth*	Achievement Record				
	Very Low	Low	Fair	High	Very High
Implicit	10 (50.0%)	35 (53.0%)	93 (65.0%)	74 (63.3%)	52 (69.3%)
Explicit	10 (50.0%)	30 (46.1%)	50 (35.0%)	43 (36.7%)	23 (30.7%)
	N = 20	N = 65	N = 143	N = 117	N = 75

Gamma = -0.14

*In examining differences in implicit and explicit warmth the category "Implicit Warmth Communicated" was included in the total "explicit" responses since the coding system assumed that such responses were also at least instances of "Explicit Warmth in Decision Making". Note also that responses coded "No Warmth" were ommitted from this analysis.

We once again performed similar analyses for teacher responses to behavior problems in the two studies and found no major differences in teacher warmth for students with different records of achievement in either study. When the results were aggregated to the teacher level, there were no significant differences in teacher warmth for responses to behavior problems. However, the comparison of teacher responses for high and low achieving students who presented academic problems does reveal a difference in teacher warmth. The mean levels of teacher warmth were 1.20 for students with records of low achievement and 1.00 for students with records of high achievement. With 156 teachers in the hypothetical student study, this difference was significant at the .01 level. In the roll book student study the comparison involved only 79 teachers whose responses evidenced about the same amount of warmth for high achieving students (1.13) as for low achieving students (1.09).

Thus we discovered two tendencies in teacher responses to academic problems which work against each other. If we ask which students are more likely to evoke some warmth (as opposed to "no warmth") in teacher responses, the answer is high achieving students. If, however, we ask which students are more likely to evoke explicit warmth (as opposed to implicit warmth) in teacher responses, the answer is low achieving students. In the hypothetical student study the latter tendency was stronger than the former, and we found significant differences in teacher warmth for low achieving and high achieving students when we performed the analysis of data aggregated to the teacher level. In the roll book student study the two trends were of about equal strength, and we found no significant differences in the analysis at the teacher level.

Although our examination of teacher responses to academic problems produced some evidence to support our original hypothesis that teachers would be warmer to low achieving students than to high achieving students, the pattern is not as simple as we originally thought.

The Effects of Student Behavior Record on Teacher Standards and Warmth

In analyzing the effects of student behavior records on teacher responses we once again examined responses to both behavior problems and academic problems even though we realized that past student behavior was not directly related to academic problems. As expected, teachers appear to present academic standards to well-behaved and poorly behaved students at about the same rate. The results of both the hypothetical student study and the roll book student study reveal no major differences in teacher standards for students with different records of social behavior.

Our examination of teacher responses to behavior problems, however, does reveal some differences in teacher standards for students with different records of behavior. As table 8 and table 9 below show, in both studies students with records of poor behavior evoke more explicit communications of standards than students with records of good behavior, though students with good behavior records evoke more implicit communications of standards than those with poor behavior records.

Table 8 - Distribution of Teacher Responses Scored on Standards for Behavior Problems, by Student Behavior Record in the Hypothetical Student Study

Standards	Behavior Record: Poor	Good
No Evidence	6	11
Implicit in Decision Making	30 (4.9%)	30 (4.9%)
Implicit in Communication	222 (36.4%)	279 (45.6%)
Explicit in Decision Making	63 (10.3%)	49 (8.0%)
Explicit in Communication	289 (47.4%)	241 (39.4%)
	N = 610	N = 610

Gamma = -0.15

Table 9 - Distribution of Teacher Responses Scored on Standards for Behavior Problems, by Student Behavior Record in the Roll Book Student Study

Standards	Behavior Record				
	Very Poor	Poor	Fair	Good	Very Good
No Evidence	2 (10.5%)	2 (3.3%)	1 (0.8%)	3 (1.3%)	6 (3.0%)
Implicit in Decision Making	1 (5.3%)	0 (0%)	4 (4.1%)	13 (5.8%)	13 (6.5%)
Implicit in Communication	7 (36.8%)	28 (45.9%)	74 (56.9%)	107 (47.6%)	101 (50.8%)
Explicit in Decision Making	1 (5.3%)	1 (1.6%)	7 (5.4%)	19 (8.4%)	20 (10.1%)
Explicit in Communication	8 (42.1%)	30 (49.2%)	46 (35.4%)	83 (36.4%)	59 (29.7%)

Gamma = -0.07

When we aggregated the responses to behavior problems to the teacher level, we found that students with poor behavior records received significantly more teacher presentations of standards than students with good behavior records. In the hypothetical student study the mean scores for standards in teacher responses to behavior problems were 3.00 for students with records of poor behavior and 2.78 for students with records of good behavior. With 156 teachers in the study this differences was significant at the .01 level. In the roll book student study the mean scores for standards in teacher responses to behavior problems were 2.74 for students with records of poor behavior and 2.47 for students with records of good behavior.

Thus the hypothesis that teachers would present more standards to students with good records of behavior than to those with poor records of behavior was not confirmed. Teachers clearly presented more standards to students with records of poor behavior when responding to behavior problems. While this is contrary

to our hypothesis, it is more intuitively reasonable and consistent with earlier research on teaching.

When we examined the effects of student behavior records on teacher warmth we found two trends parallel to those identified earlier in the analyses of the effects of student achievement record. First, there is more evidence of warmth in teacher responses to students with records of good behavior than to those with records of poor behavior. Second, there is more evidence of explicit warmth in teacher responses to poorly behaved students than in responses to well-behaved students. These trends appeared in teacher responses to both academic problems and behavior problems, though the trends were stronger in the case of the more directly related behavior problems.

To examine these trends we regrouped the data according to the methods described earlier for tables 7a and 7b and calculated the gammas for the relationships. Thus we examined the relationships in both studies between warmth and behavior record using two breakdowns of warmth ("no warmth" vs. "warmth" and "implicit warmth" vs. "explicit warmth"). Although teachers were more likely to be warm to well-behaved students in both the hypothetical student study (gamma = 0.14) and in the roll book student study (gamma = 0.15), there was a slight tendency for them to use less explicit warmth with well-behaved students in the hypothetical student study (gamma = -0.05) and in the roll book student study (gamma = -0.11).

These patterns are stronger when we look at teacher responses to the more directly related behavior problems. Once again teachers were more likely to be warm to well-behaved students in both the hypothetical student study (gamma = 0.30) and the roll book student study (gamma = 0.15). However, teachers were more likely to present explicit warmth to poorly behaved students in the hypothetical student study (gamma = -0.29) and in the roll book student study (gamma = -0.30).

Thus in teacher responses for both academic and behavior problems these two trends work against each other to reduce any differences we might find when we perform the analysis using all the categories of teacher warmth. Any differences which we find when we aggregate the data to the teacher level serve to show which trend is stronger.

At the teacher level the analysis of teacher responses to academic problems reveals that teachers in the hypothetical student study were significantly warmer to students with good behavior records than to students with poor behavior records. The mean scores for teacher warmth were 1.19 for students with records of good behavior and 1.07 for students with records of poor behavior. With 156 teachers in the study this difference was significant at the .05 level. The results of the roll book student study show no substantial differences in teacher warmth for students with different records of behavior.

The analysis of responses to behavior problems at the teacher level indicates that in both studies teachers were warmer to students with records of good social behavior than to those with records of poor social behavior. In the hypothetical student study the means scores for warmth were 0.70 for students with good behivior records and 0.59 for students with poor behavior records. With 156 teachers in the study this difference was significant at the .05 level. In the roll book student study the mean scores for warmth were 0.76 for students with records of good behavior and 0.69 for students with records of poor behavior.

Thus the hypothesis that teachers would be warmer to students with records of poor behavior than to those with records of good behavior was refuted by the results of the two studies. Teachers tended to present more warmth to students with good records of behavior. There was, however, also a trend for teachers to present more explicit warmth to students with records of poor behavior. Both trends were stronger in teacher responses to behavior problems, no doubt because

student behavior records are more directly related to behavior problems than to academic problems.

The Effects of Performance Characteristics

The analysis of the effects of student performance characteristics on teacher reports of behavior suggest that these characteristics have more complex effects than we originally predicted. The response patterns differ in terms of the type of problem presented by the student. There is at least some evidence that teachers present more academic standards to students whose academic records fall in the middle of the range of achievement. The results of the roll book study show that students at either end of the range of achievement seem to receive fewer standards. Presenting more academic standards to middle range students is a sensible procedure as they are least likely to be set in their ways. For behavior problems, a distinctly different pattern emerges. There teachers present significantly more standards to students with records of poor social behavior than they do to students with records of good social behavior.

When teacher responses to academic and behavioral problems are coded in terms of warmth, two patterns emerge. First, teachers seem to be warmer to students with records of high achievement and to those with records of good behavior. Second, they use more explicit warmth with low achieving and with poorly behaved students. These trends, as expected, are stronger when the performance characteristic is more directly related to the type of classroom problem.

While these two trends appear in teacher responses to students with differences in academic record and social behavior record, the relative strength of the trends differ in each case. The result is that, overall, teachers are significantly warmer to students with records of low achievement

than to those with records of high achievement, and that teachers are significantly warmer to students with records of good social behavior than to those with records of poor social behavior.

Discussion

Reviewing out initial conception of the problems in predicting teacher standards and warmth based on knowledge of student characteristics, in the light of the results of the two studies, we are left with three new insights about this process. First, it appears that there are differences in the relative effects of the performance and status characteristics. Second, the classroom behavior of the students seems to have a great effect on teacher responses and on the relationship of teacher standards and warmth to student characteristics. Finally, it has proved useful to conceive of a range of student performances and teacher responses rather than viewing these variables as dichotomous and the relationships as linear.

There are clear differences in the magnitude of the effects of the status and performance characteristics. The effects of the status characteristics are weaker. The failure to find a consistent and convincing pattern of differences in teacher standards and warmth based on differences in student ethnicity and sex is not surprising even in light of the earlier studies which reported such differences. (Coates, 1972; Cooper, et al., 1975; Gay, 1975; U.S. Civil Rights Commission, 1973; Adams and LaVoie, 1974; Jackson and Lahaderne, 1967; Dweck, 1975) The present studies differed from the earlier studies in two important ways. First, the behavior of the students to which teachers were responding was controlled by using the hypothetical classroom problems to prompt teacher response. In the earlier studies it was not possible to control for differences in student behavior. Thus one could not decide

whether differences in teacher behavior were due to differences in student characteristics like ethnicity and sex, or to differences in student characteristics which may have been associated with differences in student ethnicity and sex. Second, earlier studies did not present student performance characteristics along with status characteristics. Thus they may have either a) evoked differences in teacher behavior based on teacher assumptions of performance characteristics associated with status characteristics; or b) prompted teacher behavior differences based on differences in actual student performance characteristics unknown to the researchers.

Of course, it may be true that teachers think more rationally and present themselves better in the hypothetical situations of the present studies than in the stress situations of the real classrooms of the earlier studies. Teachers may feel that it makes sense to react in terms of student performance differences and not in terms of student status differences.

Nevertheless, the significant differences in teacher behavior associated with student status characteristics occurred in the roll book student study. There teachers presented fewer standards and greater warmth for academic problems to Asian students and fewer standards for academic problems and more standards for behavior problems to Black students. In that study it was impossible to control for the other characteristics of the students without severely reducing the number of cases for analysis. In the hypothetical student study, where student performance characteristics were controlled, no differences in teacher behavior were detected.

Teacher responses seemed more sensitive to differences in student performance characteristics. While teacher standards were not affected in any significant way by differences in the achievement records, a finding which we discuss in more detail later, there were significant differences in teacher

standards for students with different behavior records and in teacher warmth for students with different academic records and students with different behavior records. Such characteristics are apparently viewed as more relevent to teachers formulating their responses.

Examining the effect of the classroom problems on the relationship of teacher standards and warmth to student characteristics, we find additional evidence for the relevance argument. Teacher responses to classroom academic problems are more likely to be affected by student academic achievement records than student social behavior records, while teacher responses to classroom behavior problems are more likely to be affected by student social behavior records than student academic achievement records.

Furthermore, there are differences in the actual response patterns of teachers to academic problems and social behavior problems. Teachers present more standards and less warmth to students with poor records of social behavior presenting behavior problems, while they present more warmth to students with records of low academic achievement presenting academic problems. At first sight, it appears as if teachers are just less concerned about rectifying poor academic performance than rectifying poor social behavior. There are, however, several possible explanations for this pattern of responses. (For a detailed discussion, see Natriello, 1979a.)

It seems reasonable to conclude that teachers are more likely to react warmly to students presenting academic problems, while reacting with less warmth to those presenting behavior problems because performance in the academic sphere is seen as depending upon a student's ability as well as effort, while performance in the behavioral sphere is seen as depending only upon effort. Thus it might be that teachers feel that students with academic problems

lack ability and need support, whereas students with behavior problems simply are not making an effort and need to be made to conform to certain standards. This would also explain the higher levels of teacher standards in response to behavior problems presented by students with poor records of behavior.

A second explanation of the differences in teacher behavior when reacting to academic and behavior problems relies on differences in the effects of those problems in the classroom and the school. Problems of student social behavior are by their very nature more public than problems of academic achievement. Behavior problems have visibility at two levels at which academic problems really do not. First, behavior problems are more visible than academic problems in the classroom. Social behavior problems presented by a single student are more likely to disturb both the teacher and the other students than are academic problems. Thus the pressure for a teacher to apply standards is much less in the case of academic problems which affect only a single student in a much less visible way. Visibility has an effect at a second level. It has been noted that schools tend to be loosely coupled organizations in which administrators know very little about what actually happens in classrooms and in which very little evaluation goes on (Weick, 1976; Meyer and Rowan, 1975; Utande, 1976). Given this situation in which administrators are not well-informed in general about the conduct of instruction, they seem to react most to particularly visible aspects of the teaching-learning process. Student behavior problems, because of their visibility, are one of the few aspects of the teaching-learning process that are apparent to administrators. Thus teachers are likely to be held accountable for maintaining school norms for student behavior more than school norms for academic performance. This puts additional pressure on teachers to present standards for social behavior to students.

While in our hypotheses we conceived of both teacher standards and warmth and the student performance characteristics as dichotomous variables, our results indicate that it would be useful to examine the interactions between such variables along a range of values. For example, because we had a range of achievement levels in the roll book student study we were able to discover that teachers presented more standards to students in the middle of the achievement range than to those at the two extremes. This suggests that teachers may give up on those students at the bottom of the achievement range, conclude that those at the top of the range can manage for themselves, and concentrate their efforts on those students in the middle. If this finding can be confirmed by future studies it will shed new insight on one of the most lively controversies in the sociology of education. While some social scientists and educators have stressed the role of schools as socializing agencies that transmit skills and attitudes to the young, others have portrayed them as sorting mechanisms that simply select and certify students with certain skills and attitudes (Collins, 1971). It may be the case that schools do both. Teachers may be forced to "select" certain students to ignore and attempt to socialize--present standards to--the rest. Thus selection may take place when gross difficiencies make it impossible to reach certain students, and socialization may take place when teachers feel that they can work with other students.

A second example of the importance of not dichotomizing the variables arises in the analyses of teacher warmth. Teachers present more warmth (as opposed to "no warmth") to students with high achievement records and good social behavior records. However, teachers present more explicit warmth (as opposed to "implicit warmth") to students with low achievement records and to those with poor social

behavior records. While we cannot be sure why teachers respond in these different ways, it seems reasonable that teachers may feel that they have to be more explicit to adequately communicate warmth to students with low achievement or poor social behavior.

Conclusion

The present experimental studies indicate that generally teachers do not report behaving differently toward students on the basis of differences in student status characteristics. With a few exceptions, teachers seldom discriminate in their presentations of standards and warmth on the basis of student ethnicity or sex.

Earlier studies have tended to portray teachers as making decisions to behave differently toward students for reasons unconnected with the students' performance in class. In the present studies teachers portray themselves as reacting to students with different performance characteristics in ways which are quite reasonable given the conditions under which they must work.

The reasons given at leisure by teachers, although internally consistent, may indeed, distort the picture of what happens in classrooms. In the hypothetical student study, where full information was presented for each student, teachers did not let ethnicity affect their responses. Perhaps, in the classroom where full information is less often available or known, teachers might use ethnic status as an indicator of previous performance, academic or behavioral. A second basis for discounting the results of these studies is that teachers, out of the classroom, have an opportunity to put their best feet forward and do so. Finally, our conclusions regarding differences in teacher standards and warmth tell us nothing about other dimensions of teacher behavior which may be influenced by student status and performance characteristics.

On the other hand, the observational studies previously conducted have ignored student behavior antecedent to teacher responses. They may be improperly attributing to student status characteristics differences in teacher behavior which, in fact, are responses to student performance in class.

So the current studies make necessary a new, but not very difficult, set of studies inside classrooms. In these studies teacher behaviors should be sequentially related to preceding student behaviors. Only then can we assess the validity of the results reported here.

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